

## INTERNATIONAL SEARCH REPORT

II International Application No  
PCT/EP2004/004980

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H04R3/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04R H04B H03G H03F G10L G01S

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 116 961 A (NOKIA MOBILE PHONES LTD) 18 July 2001 (2001-07-18)	1
Y	abstract; figures 1-4 column 1, line 36 - line 57 column 3, line 6 - line 68 column 4, line 40 - line 58 column 5, line 26 - line 55 column 6, line 4 - line 23; claims 1-4, 7-9, 13-19	2-20
Y	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 10, 30 November 1995 (1995-11-30) & JP 7 176178 A (ALPINE ELECTRON INC), 14 July 1995 (1995-07-14) abstract; figure 1	2-20
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

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\*P\* document published prior to the international filing date but later than the priority date claimed

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\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search

27 October 2004

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Timms, O

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/072461 A1 (MOORER JAMES A) 17 April 2003 (2003-04-17) abstract; claims 1,35,41; figure 9 -----	1-20
A	GB 2 097 121 A (FERRANTI LTD) 27 October 1982 (1982-10-27) abstract; figure 1 page 1, line 5 - line 17 page 3, line 105 - line 116 page 5, line 25 - line 30 -----	1-20
A	EP 1 083 543 A (VOLKSWAGENWERK AG) 14 March 2001 (2001-03-14) abstract; claims 1-4,7-9; figure 1 -----	1,2,16, 20
P,X	DE 101 56 954 A (DAIMLER CHRYSLER AG) 18 June 2003 (2003-06-18) the whole document -----	1-20
P,X	EP 1 343 351 A (ERICSSON TELEFON AB L M) 10 September 2003 (2003-09-10) the whole document -----	1,2, 16-18,20

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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